INFECTION CONTROL GUIDELINES

FIFTH EDITION, 2002

TENNESSEE DEPARTMENT OF HEALTH
Bureau of Health Services Administration

INFECTION CONTROL
FIFTH EDITION
TABLE OF CONTENTS

Infection Control

Fifth Edition

1. Preface

Environmental and physical safety for both health provider and patients may be achieved through compliance with standards mandated by CDC, OSHA, TOSHA, and professional attention to universal precautions and medical asepsis. To prevent the spread of infectious diseases and to promote biosafety in the work place, the ensuing parameters must be given to all new employees with annual in-service and additional in-service whenever significant changes are made and/or to reflect CDC and other infectious disease control updates.

Section II OSHA Regulations contains the recent update of the Exposure Control Plan mandated by the standard, and should be used in conjunction with Section III Universal Precautions in meeting OSHA requirements.

II. OSHA Regulations

1. Definitions:

Antiseptic - a substance that will inhibit the growth and development of microorganisms without necessarily destroying them.

Blood - human blood, human blood components and products made from human blood.

Bloodborne pathogens - pathogenic microorganisms present in human blood that can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV), human immunodeficiency virus (HIV**)** and hepatitis C virus (HCV).

Clinical Laboratory - a workplace where diagnostic or other screening procedures are performed on blood or other potentially infectious materials.

Contaminated - the presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.

Contaminated Laundry-laundry which has been soiled with blood or other potentially infectious materials or may contain sharps.

Contaminated Sharps - any contaminated object that can penetrate the skin including, but not limited to, needles, scalpels, broken glass, broken capillary tubes, and exposed ends of dental wires.

Decontamination - the use of physical or chemical means to remove, inactivate or destroy blood borne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use or disposal.

Disinfectant - a chemical that kills infectious agents outside the body by direct exposure to chemical or physical agents.

Engineering Controls - controls (e.g., sharps disposal containers, self-sheathing needles) that isolate or remove the blood borne pathogens hazard from the workplace.

Exposure Incident - a specific eye, mouth, other mucous membrane, non-intact skin or parenteral contact with blood or other potentially infectious materials that results from the performance of an employee's duties.

Germicide - an agent that kills pathogenic microorganisms.

Handwashing Facilities - a facility providing an adequate supply of running potable water, soap, and single use towels

Microorganisms - a minute microscopic living organism such as bacteria, viruses, molds, yeast, and protozoa.

Occupational Exposure - reasonably anticipated skin, eye, mucous membrane or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.

Other Potentially Infectious Materials:

(1) The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids;
(2) Any unfixed tissue or organ (other than intact skin) from a human (living or dead); and
(3) HIV-containing cell or tissue cultures, organ cultures and HIV, HCV, or HBV containing culture medium or other solutions; and blood, organs or other tissues from experimental animals infected with HIV or HBV.

Parenteral - piercing mucous membrane or the skin barrier through such events as needle sticks, human bites, cuts, and abrasions.

Pathogenic microorganism - a microorganism that can cause disease.

Percutaneous - through the skin. Infectious materials may enter the body through compromised skin surfaces (i.e. needle sticks, acne, cuts, lesions, etc.)

Personal Protective Equipment - specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes (e.g., uniforms, pants, shirts or blouses) not intended to function, as protection against a hazard are not considered to be personal protective equipment. Personal protective equipment will be considered appropriate only if it does not permit blood or other potentially infectious materials to pass through to or reach the employee's work clothes, street clothes, undergarments, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used.

Regulated Waste - liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials.

Source Individual - any individual, living or dead, whose blood or other potentially infectious materials may be a source of occupational exposure to the employee. Examples include, but are not limited to, hospital and clinic patients; clients in institutions for the developmentally disabled; trauma victims; clients of drug and alcohol treatment facilities; residents of hospices and nursing homes; human remains; and individuals who donate or sell blood or blood components.

Sterilize - the use of a physical or chemical procedure to destroy all microbial life including highly resistant bacterial endospores.

Universal Precautions - an approach to infection control. According to the concept of Universal Precautions, all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, HCV, and other blood borne pathogens. Universal precautions apply to blood and other potentially infectious material defined above. Impervious barrier clothing, gloves, face shields, eyewear, must be worn for procedures or with clinical contacts in which blood or potentially infectious materials are present.

Work Practice Controls - controls that reduce the likelihood of exposure by altering the manner in which a task is performed (e.g., prohibiting recapping of needles by a two-handed technique).

II. OSHA Regulations (cont.)

2. Exposure Control Plan

PURPOSE:

A written Exposure Control Plan shall be established to eliminate or minimize employee exposure. The following elements shall be included:

A. EXPOSURE DETERMINATION: means the identification of those individuals whose classification includes tasks which may include skin, eye, mucousmembrane or parenteral contact with blood or other potentially infectious materials.
Employees whose activities place them at risk are:

Physicians - routine patient assessment - taking of specimens

Nurses - patient assessment, blood tests, family planning and prenatal assessment, home health medical procedures (i.e. infusion or changing dressing, etc.) and specimen gathering.

Nurse Assistants - nurse assistants who bathe persons with non-intact skin (open skin lesions) or medical devices used in the home (catheters, etc.) and those who provide laboratory services in clinics.

Dentists - saliva (all saliva during dental procedures is considered infectious) during invasive procedures (which nearly always contains blood).

Dental Assistants - saliva while assisting dentists. Any personnel who cleans equipment, supplies after health assessments.

Housekeeping or custodians - who clean or decontaminate bins or cans in which regulated wastes are gathered in health departments.

Laboratory Workers - any employees who collect, process or perform testing on human specimens in laboratories including the local health department laboratories.

Sexually Transmitted Diseases and Tuberculosis representatives - who must provide services for and take specimens from individuals with HIV, HBV, HCV, GC/syphilis or Tuberculosis.

Employees of any classification - performing tasks with an exposure risk (e.g. clerk performing nurse assistant duties).

B. METHODS OF COMPLIANCE -
the written Exposure Control Plan shall include a description of how protection will be achieved.

1. General, universal precautions shall be observed to prevent contact with blood or other potentially infectious materials. (See Section III) **UNDER CIRCUMSTANCES IN WHICH DIFFERENTIATION BETWEEN BODY FLUID TYPES IS DIFFICULT OR IMPOSSIBLE, ALL BODY**

FLUIDS SHALL BE CONSIDERED POTENTIALLY INFECTIOUS MATERIALS. Employees shall be trained in Universal Precautions.

2. In accordance with TCA 50-3-203 (e) (1) (e) (4) evaluate on a continuing basis available sharps injury prevention devices and use those that are more effective in preventing exposure. To facilitate this effort, the Medical Services Evaluation Committee has appointed a Safer Sharps Work Group to meet on a continuing basis and evaluate the newer devices as they become available. The work group is made up of medical, dental and nursing professionals from the central office and the field. This group is charged with obtaining information on the newer protective devices and deciding those that will be evaluated by means of pilot projects in the health department clinics. An evaluation form will be filled out by the clinic providers performing the evaluation, and these evaluations will be used by the Safer Sharps Work Group in determining which devices will be used in state-wide clinics and subsequently placed on the state contract.

   The devices selected by the workgroup will be announced to the field by means of periodic Safer Sharps Reports which will be kept on file by the TOSHA liaison in the central office

   The locations making use of the newer sharps will provide on site training for those health care providers who will be expected to utilize the devices.

3. Work practice controls used to prevent exposure shall be described. A schedule for infection control maintenance of engineering and work place controls shall be established in each clinic.

   a. Handwashing facilities shall be readily accessible in clinical settings. Where this is not feasible (such as in a home visit), other handwashing cleansers and towels must be made available. The employees will wash hands with soap under running potable water as soon as possible after leaving the home.
      - Handwashing is to take place following removal of protective clothing or gloves.
      - Hands and any other exposed areas must be washed with soap and water after exposure to body areas with blood or other infectious body fluids.

      *If a mucous membrane is splashed or sprayed by an infectious material, the mucous membrane must be flushed with running water immediately.

   b. Contaminated needles and other used sharps must not be bent, broken, sheared, recapped or removed from syringes. The only exception will be dental procedures requiring multiple injections of an anesthetic. In this case resheathing instruments, self-sheathing needles, or forceps are to be used to prevent recapping by hand.

      Contaminated sharps (needles, scapels, lancets, lancet platforms, microglass tubes, etc.) shall be discarded immediately into containers that are closable,

puncture resistant, leakproof on sides and bottom, and color coded or labeled biohazard. CONTAINERS ARE NOT TO BE FILLED ABOVE THE FULL LINE. Sharps should not be discarded into glass containers. These waste containers shall be placed out of reach of children.

- ❖ Containers of used sharps will be closed before removing from the clinic site to prevent spillage or protrusion of contents during handling, storage, transport or shipping.
- ❖ Filled sharp containers after closing must, if necessary, be taped shut so that it will not open and be disposed of in regulated waste containers or labeled biohazard or color coded containers. Patients who use syringes and needles in the home may use cans with screw on lids or lids that may be taped securely and must be labeled biohazard before disposing in patient's garbage. Families and patients shall be instructed by the health care provider to dispose of needles and syringes in this manner. Note: No food container shall be used for hazardous wastes

c. Contaminated laundry shall be handled as little as possible with minimal agitation. Contaminated laundry should be bagged in color coded or labeled, leakproof bags. All employees handling contaminated laundry must wear protective clothing. An impervious apron and gloves are appropriate. (See section on Infectious Waste for further instructions).

d. Blood or other potentially infectious specimen shall be placed in a container, which prevents leakage during collection, handling, processing, storage, transport or shipping. After labeling properly (color-coded or biohazard sticker), all specimen should be placed in the appropriate, hard impervious containers. Plastic bags are not to be used to transport specimen. If the outside of the specimen container becomes contaminated, the specimen must be placed within a second hard, impervious container with the color-coded or biohazard label before transporting or mailing.

e. Eating, drinking, applying cosmetics, and handling contact lenses are prohibited in areas where there is reasonable likelihood of occupational exposure.

f. Food and drink must not be kept in refrigerators, freezers, shelves, and cabinets, not on countertops or benches where blood or other potentially infectious materials are present. These freezers, refrigerators, cabinets, etc. must be labeled with biohazard labels. No food, drink or personal items should be kept in the clinic or laboratory areas.

g. All procedures involving blood or other potentially infectious materials shall be performed in such a manner as to minimize splashing or spraying of these substances.

4. Protective devices or barrier protection will be provided for staff to prevent exposure to contamination during exposure prone procedures.

   a. Disposable gloves shall be worn:

   ∗Whenever a blood or other potentially infectious specimen is taken, or an invasive procedure is performed,

   ∗Whenever the HCW has cuts, dermatitis or open skin lesions.

   ∗If a HCW has seeping skin lesions or multiple open wounds they should not participate in invasion prone procedures until healed

   ∗Whenever the patient has open skin lesions to clean

∗To handle specimen containers.

Wash hands under running water with detergent soap before putting on gloves and wash carefully after removal of gloves.

Disposable gloves shall be used only once and disposed of in impervious waste containers.

Gloves shall be changed after each patient contact.

Utility gloves are to be worn when cleaning instruments, examining tables, cans, bins or other receptacles used for wastes.

These gloves may be washed with soap under running water and thoroughly rinsed in bleach 1:10 solution. They must be carefully inspected each time used to assure their integrity. When no longer impervious, they must be discarded

b. Masks, Eye Protection, Face Shields, and impervious clothing shall be worn whenever the possibility of splashes, spray or splatter of infectious materials is possible. Contaminated face shields, goggles and other devices shall be cleaned after use with 1:10 bleach or equivalent decontaminant. Those masks or barriers which are disposable, shall be disposed in contaminated waste.

c. Cotton laboratory coats or lab coats or aprons made of impervious material should be worn over clothing whenever occupational exposure is possible. Disposable coats or aprons contaminated by infectious materials must be disposed of into leakproof regulated color coded or labeled biohazard waste containers.

5. Employees shall ensure that the worksite is maintained in a clean and sanitary condition and shall establish a schedule for cleaning and decontamination necessary in clinical work areas.

a. Equipment and work surfaces must be decontaminated with an appropriate decontaminant following spillage of infectious material and at the end of each work shift. (Freshly made 1:10 solution of bleach shall be used) Always make fresh daily as it loses strength if it sits too long)*

**To make a 10% disinfecting Bleach Solution:*
Mix one part commercially available straight bleach to nine parts water.

b. 1.Clinical examination tables will be covered with a clean paper barrier between each patient. If this paper becomes wet or otherwise contaminated, the table must be washed with a germicidal detergent and a decontaminant (10% bleach solution). The paper from the examination tables that is visibly contaminated with potentially infectious materials must be disposed of in double bagged regulated color-coded or biohazard labeled wastes. Otherwise, paper may be put into regular waste containers.

2.Bins, cans and other receptacles to be reused, which may become contaminated, must be inspected and decontaminated as often as necessary. (At least once a week) with a 10% bleach solution.

3.Broken glass should be picked up with forceps, tongs, or a dustpan with brush.

4.Filled sharps containers must be closed, removed and replaced with new disposable containers. Used sharp containers must be disposed of as infections waste (See Section V). These containers must not be over filled. (See Appendix E for further information on Labeling)

C. HEPATITIS B VACCINATION:

Hepatitis B vaccination series will be made available, at no cost to the employees, to every employee who may have occupational exposure to blood or other potentially infectious material. For new employees, the vaccine should be made available within 10 working days of their initial assignment. Post vaccination testing for HB titers shall be performed 1-2 months after completion of the series.
Non-responders (<10miu/ml) shall have the 3 series vaccine repeated. The employee shall then be retested and if found again to be a non-responder no further vaccine is administered. However, if there is an exposure incident to a source known to be infected with HB, the non-responder will receive HBIG X 2. The option of giving HBIG X 1 and restarting the vaccine series is preferred for those who have not completed a second 3-dose vaccine series.
Employees, who decline to accept the Hepatitis B vaccination series, must sign the PH form indicating their refusal. *(See form in Model Exposure Plan) Should a routine booster dose(s) be recommend by the U.S. Public Health Service at a future date, such booster(s) will be made available to the employee at no cost.
Also see Appendix A for other indications for post exposure vaccine and or HBIG administration.

D. POST EXPOSURE EVALUATION AND FOLLOW-UP

Following any exposure incident, the exposed employee shall immediately receive confidential medical evaluation and follow-up. Any exposure incident shall be documented on an incident form, identifying the route of exposure and circumstances under which the incident occurred. Describe the incident in detail, including site of exposure, depth of penetration of the injury, presence of patient or employee blood, etc. As directed by TCA 50-3-203(e)(1)-(e)(4), document the type and brand of device in use when there is an exposure incident. The vaccine status of the employee shall be indicated on the form, along with any information on the source individual, which may be helpful in establishing risk. Corrective action to prevent further occurrence of a similar incident should be included also. In addition to the incident form, a worker's compensation form shall be filed as well. Distribution and circumstance of both forms shall be predefined and limited to assure confidentiality.

If the source individual has not been tested for HBV, HIV or HCV, obtain consent for testing and perform tests for presence of HbsAg and presence of antibodies for HIV and HCV. (If the source individual already has a positive test for these infections, they need not be tested again.) Consent form for HIV, HBV and HCV testing (See Appendix B) should be signed, as well as PH 1778 authorizing release of medical information (See Appendix C).

Results of the source individual's testing shall be made available to the exposed employee, and the employee shall be informed of applicable laws regarding disclosure of the information.

If the source individual has refused consent for further blood to be drawn and tested or if source is unknown, then post exposure management will have to be individualized, taking into account the risk status of the source, as feasible.

E. POST EXPOSURE MANAGEMENT

All post exposure evaluation and management shall be carried out by a health care professional in a confidential manner. The number of health care professionals involved in evaluation and follow up will be sharply limited and predefined.

The health care professional's written opinion for Hepatitis B vaccination shall be limited to whether Hepatitis B vaccination is indicated for an employee, and if the employee has received such vaccination.

The health care professional's written opinion for post-exposure evaluation and follow-up shall be limited to the following:

That the employee has been informed of the results of the evaluation, and the employee has been told about any medical condition resulting from exposure to blood or other potentially infectious material, which require further follow-up. All other findings or diagnoses shall remain confidential and shall not be included in the written report. Confidential medical evaluation shall include evaluation of any acute illness occurring 12 weeks post exposure, methods to prevent disease transmission and need for prophylaxis.(See below)

A baseline HIV serology is to be obtained from the employee and a Hepatitis B and Hepatitis C exposure profile is also to be performed. Written consent for these tests are to be obtained.(See Appendix B). If the employee is known to be Hepatitis B Surface Antibody positive, no Hepatitis B profile is needed. Similarly, if the employee is known to be Hepatitis C antibody positive, no Hepatitis C profile is necessary. **S**ee Table in Appendix A for indications for post exposure Hepatitis B vaccine and or HBIG administration.

HBV Post Exposure Management
When the sources HBsAg positive, exposed employees who are nonresponders after two series of vaccine should be given HBIG times 2. The option of giving HBIG times one in re initiating vaccine series is preferred for those who have not completed a second 3-dose vaccine series.

HBIG should be given ASAP (preferably within 24 hours). Effectiveness of HBIG > 7 days is unknown. When hepatitis B vaccine is indicated, it should also be given ASAP (preferably within 24 hours) and can be administered simultaneously with HBIG at a separate site (the vaccine should always be given in the deltoid muscle).

HCV Post Exposure Management
For post exposure to the source identified as HCV-positive, baseline serologic testing for anti-HCV should be performed, along with ALT (alanine aminotransferase) activity. Follow-up with the same tests should be done at 4 to 6 months post exposure. If earlier diagnosis of HCV infection is desired, testing for HCV-RNA may be performed at 4 to 6 weeks. Confirm all anti-HCV results reported positive by enzyme immunoassay using supplemental anti-HCV testing (e.g., recombinant immunoblot assay [RIBA ™]).

IG and antiviral agents are not recommended for PEP after exposure to HCV-positive blood. In addition, no guidelines exist for administration of therapy during the acute phase of HCV

infection. However, limited data indicate that antiviral therapy might be beneficial when started early in the course of HCV infection. When HCV infection is identified early, the person should be referred for medical management to a specialist knowledgeable in this area.

HIV Post Exposure Management
Is recommended that in all exposure events with sources known or highly suspicious for HIV infection, and prophylaxis is likely to be indicated, that the employee either be immediately referred to a specialty physician or clinic for confidential management or if such a referral will mean further delay that the local health department be responsible for initiating therapy as soon as possible (within the first 36 hours) following exposure. Thereafter referral should be made to a specialist for management.

Animal studies showed less benefit when PEP was started more than 36 hours post exposure. The interval after which no benefit is gained from PEP in humans is undefined. Because four weeks of ZDV appeared protective in occupational and animal studies, PEP probably should be administered for four weeks, if tolerated.

There are a variety of regimens for double and triple drug therapies and the choice depends on factors involving the host, the source and mode of exposure. Triple drug therapy should be instituted for high-risk exposures and double drug therapy should be used for lower risk exposures. Consult with physician for determination of high risk exposures. Choices need to be made based on suspected resistance to the drugs, pregnancy status of the exposed person and underlying pre-existing medical conditions. It is best to make the choice in conjunction with consultation with a specialist in this area. However, PEP should not be delayed waiting for a consultation. The regimen needs to be the evaluated after 72 hours. The **National Clinicians Post Exposure Prophylaxis Hotline** (PEP Line [1-888-448-4911]) is a good source for help in selecting a drug regimen. Current PEP Guidelines and Treatment protocols are posted on the World Wide Web at: hppt://www.ucsf.edu/hivcntr/resources/pep/index.html

For the local health department be prepared to start PEP, arrangements must be made for the Regional Health Department or Regional Pharmacy to have on hand a supply of the HIV medications necessary for immediate administration. The regions must also be prepared to make the newer medications available to the employee's private physician if indicated. The pharmacy should be prepared to track shelf life on these drugs in order to be able to rotate stock and avoid shelf life expiration of these more expensive drugs.

Drugs currently supplied include: Zidovudine (RETROVIR; ZDV; AZT), Lamivudine (EPIVIR; 3TC) (these two drugs are available as COMBIVIR) and Indinavir (CRIXIVAN; IDV). A different combination may be recommended by a specialist.

Follow-up of HCP Exposed to HIV
Post exposure Testing. HCP with occupational exposure to HIV should receive follow-up counseling, post exposure testing, and medical evaluation, regardless of whether they receive PEP. HIV-antibody testing should be performed for at least 6 months post exposure (e.g., at 6 weeks, 12 weeks, and 6 months). Extended HIV follow-up (e.g., for 12 months) is recommended for HCP who become infected with HCV following exposure to a source co infected with HIV and HCV. Whether extended follow-up is indicated in other circumstances (e.g., exposure to a source co infected with HIV and HCV in the absence of HCV seroconversion or for exposed persons with a medical history suggesting an impaired ability to develop an antibody response to

acute infection) is unclear. Although rare instances of delayed HIV seroconversion have been reported (167,168), the infrequency of this occurrence does not warrant adding to the anxiety level of the exposed persons by routinely extending the duration of post exposure follow-up. However, this recommendation should not preclude a decision to extend follow-up in an individual situation based on the clinical judgment of the exposed person's health-care provider. HIV testing should be performed on any exposed person who has an illness that is compatible with an acute retroviral syndrome, regardless of the interval since exposure. When HIV infection is identified, the person should be referred to a specialist knowledgeable in the area of HIV treatment and counseling for medical management. HIV-antibody testing should be performed for at least 6 months post exposure.

F. COMMUNICATION OF HAZARDS:

Warning labels and biohazard stickers or signs must be affixed to all regulated wastes, refrigerators and freezers containing blood or other infectious or hazardous waste materials. Containers used to store, transport or ship blood or other potentially infectious materials must also be labeled.

The biohazard label may be fluorescent orange or orange-red or predominately red with lettering symbols in a contrasting color.

Labels should be affixed in such a manner that they will not be lost or removed.

Red bags or red containers may be substituted for labels.

Containers of blood or other potentially infectious materials must be placed in a biohazard labeled container during storage, transport, shipment or disposal.

Equipment that may become contaminated shall all be labeled with a biohazard label (example, identifies employees in laboratories).

Regulated wastes that have been decontaminated do not need to be labeled or color-coded and may be disposed of in regular wastes.

All employees will be made aware of the hazardous chemicals, of the MSDS, and how to clean up or contain spills without jeopardizing themselves.

G. ORIENTATION AND TRAINING WILL BE GIVEN FOR ALL STAFF:

1. Who may be exposed to biohazardous materials at no cost to them during work hours.
   - ❖ As soon as assigned to risk taking tasks
   - ❖ Within 90 days of completion of this standard
   - ❖ At least annually thereafter
   - ❖ Whenever significant changes in practice or procedural updates are made.

2. Training must include
   - ❖ Copy of the Federal OSHA Bloodborne Pathogen Standard with explanation of its contents.
   - ❖ General explanation of the epidemiology and symptoms of blood borne diseases Modes of transmission

- ❖ An explanation and a copy of the Exposure Control Plan for each employee
- ❖ Explanation of those tasks or activities which may put the employee at risk
- ❖ Explanation of engineering controls, work practices and personal protective devices (barriers) that will prevent or reduce exposure
- ❖ Proper handling, use, location, removal decontamination and disposal
- ❖ An explanation of when and what protective device should be used.
- ❖ Information on Hepatitis B (HIV) vaccine to include "efficacy, safety, how administered and the benefits and that HBV vaccine will be given free of charge to the employee
- ❖ Information on what to do and who to notify in an emergency in which an incident involving blood borne pathogens occurs
- ❖ Clear explanation of procedure and follow-up of an exposure incident, including forms to complete.
- ❖ Post exposure follow-up evaluation and counseling to be provided by employer
- ❖ Explanations of signs, labels and color-coding required
- ❖ Time for questions and answers allowed
- ❖ The instructor should be efficient and demonstrate proficiency in infection control practice
- ❖ Employers will assure that employees are able to demonstrate proficiency in standard microbiological practices before working with HIV or HBV

H. **RECORD KEEPING SHALL BE MAINTAINED ON EACH EMPLOYEE WHO IS AT RISK FOR OCCUPATIONAL EXPOSURE AND SHOULD INCLUDE**:

1. Name and social security number
   Hepatitis B vaccination status
   Copies of all results of examinations, medical testing and follow-up procedures.
   A copy of the health professional counselor's evaluation of the exposure incident.
2. All medical records are kept confidential and re not divulged without written consent by the employee.
3. Employee records shall be kept while employee remains in the system plus 30 years.
4. Training records shall be kept to include:
   - ❖ Dates of training
   - ❖ Content summary
   - ❖ Names and qualifications of instructor(s)
   - ❖ Records shall be kept for 3 years from time of first training
   - ❖ Annual inservice plus update when new procedures or preventive input becomes available

III. Universal Precautions

III. Universal Precautions

1. Assume ALL human blood, plasma, serum, body fluids (semen, saliva in dental procedures, cerebrospinal and amniotic fluid, breast milk, vaginal secretions and any fluid contaminated with blood) and tissues to be contaminated with Human Immunodeficiency Virus (HIV), Hepatitis B Viruses (HBV), or Hepatitis C (HCV). Handle them with appropriate care!

2. All employees with occupational exposure to blood and other potentially infectious body fluids are to be offered Hepatitis B vaccine at no cost to the employee.

3. Remember: The most susceptible route of laboratory infection for HIV, HBV, and HCV is by accidental needle sticks, contamination of the mucous membranes, or through broken, abraded or irritated skin. Use appropriate caution and maximum protection to prevent such contact.

4. Avoid spilling, splashing or open aerosolization of human blood or body fluids. Wear latex gloves and protective garments when handling human materials. If danger of splash or spills exists, use a face shield.

5. Understand the principles of good microbiological practice before working with biohazardous materials. Examples include use of aseptic technique, proper decontamination procedure, emergency biohazard spill management and proper use of biosafety equipment. Develop proficiency before beginning work.

6. Use aseptic technique. Thorough hand washing is essential after patient contact and after handling blood and body fluids and after wearing gloves and prior to exiting the clinic area. Handwashing facilities must be readily accessible to employees.

7. Use great care and caution when handling syringes and needles, sharps or glassware. Never attempt to recap or remove a used needle. Dispose of syringe-needle assemblies in sharp proof, autoclavable containers or disposable biohazard containers.

8. All contaminated liquid or solid wastes are decontaminated before disposal or disposed of in regulated color coded, labeled waste containers.

9. A spill kit (Bleach, leak proof container, paper towels, gloves, forceps, spray bottle) is to be used to clean up infectious material spills. Large spills are cleaned up by donning gloves and lab coats or aprons then pour full strength bleach around edges of spill or alternately paper towels soaked in bleach can be placed over the spill area. Approximately 20 minutes of contact time should be allowed to ensure germicidal action. All materials are then gathered into containers and soaked in bleach for 30 minutes further and then discarded. Small spills can be wiped up with paper towels and sprayed with freshly made 1:10 bleach.

10. Clean all work areas and equipment used in handling human biohazardous materials with proven disinfectant (e.g., 1:10 dilution of bleach) when concluding work to protect personnel from accidental infection.

11. Mechanical pipetting devices are used; mouth pipetting is prohibited.

12. Eating, drinking, smoking, and applying cosmetics are not permitted in the clinic or laboratory. Food may be stored in cabinets or refrigerators designated and used for this purpose only. Food storage cabinets or refrigerators should be located outside of the work area.

13. All procedures are performed carefully to minimize the creation of aerosols.

14. Laboratory coats, gowns, or uniforms are to be worn to prevent contamination of clothing that will be worn on the street or non-clinical areas. The use of disposable laboratory coats is encouraged.

15. Report all accidents, untoward occurrences and unexplained illness to your supervisor and the work physician immediately.

16. Caution must be exercised to prevent used, contaminated gloves from cross-contaminating lab surfaces, lab coats, doorknobs, wall switches, phones or lab notebooks. Remove contaminated gloves after each operation and dispose of them as biohazardous waste.

17. Understand the department's post exposure follow-up program and be familiar with the appropriate standard operating procedures for accidental exposure to human materials. The specimens involved must be identified and tested for HIV, HBV, and HCV, and proper procedures followed.

IV. Cleaning, Disinfecting, and Sterilizing

IV. Cleaning, Disinfecting, & Sterilizing

Introduction

FDA recommends that facilities using liquid chemical sterilants should:

- ❖ Adhere to the label instructions regarding concentrations and application times when soaking devices for disinfection.
- ❖ Use disposable sterile equipment and supplies when possible.
- ❖ **Do not** reuse equipment and supplies intended for single use as these products have not been manufactured to withstand additional sterilization.
- ❖ Use heat sterilization methods for heat-stable instruments and supplies.

For quality control of autoclaves used for steam sterilizing, spore tests should be performed. Frequency of spore testing should be based on the number of loads run, from once a week to once a month.

UNDERSTANDING THE LABELS OF GERMICIDES

Under the Federal Insecticide, Fungicide and Rodenticie Act (FIFRA), the Environmental Protection Agency (EPA) is responsible for the registration and regulation of germicides. In exercising this responsibility, the EPA requires that label claims be truthful, meaningful and practical for safe and effective use of the product.

When a germicide is being considered for purchase, the label should be checked for:

1. The EPA registration number
2. An ingredient statement
3. Direction for use
4. Adequate safety and precautionary information
5. The name and address of the manufacturer or distributor

Additionally, examine the label for the tabulation of benefits. The claims that appear on the label are established by testing the product against a uniform set of official standards of the Association of Official Analytical Chemists, which are used by the EPA. Under these standards a HOSPITAL DISINFECTANT must be effective against the test organisms Staphylococcus aureus, Salmonella cholerasuis and Pseudomonas aerugenous. A TUBERCULOCIDAL LABEL means the chemical has been tested against Mycobacterium tuberculosis var bovia. Labels may also include a fungicidal, virucidal and sporocidal claims.
The label on a germicide is a legal document and is a guarantee that the product will perform as stated on the label. An informed examination of the label will result in purchase of a germicide that will perform the desired functions effectively.

For general disinfecting procedures in health department clinics and laboratories, a chemical should have an EPA registration number cited on the label and also a tuberculocidal claim on the label. The only exception to this is household bleach, as described throughout this manual. *
See the following pages and Appendix C for Cleaning, Disinfecting, and Disposal of Equipment and Supplies, and Appendix D for General Housekeeping. Please note that custodial employees handling or cleaning contaminated equipment, material, or rooms come under OSHA regulations and must be offered Hepatitis B vaccine and receive training as specified in the OSHA Blood borne Pathogen standard. Also, a cleaning schedule should be posted for each individual facility. Any disinfectant used in cleaning should bear a label showing EPA approval and tuberculocidal activity.

HANDWASHING

PURPOSE

Proper handwashing technique is the single most effective procedure to prevent the cross transmission of infection from patient to HCW and from HCW to patient.

SUPPLIES

Liquid detergent, (containers must be cleaned, dried and refilled weekly as they can become contaminated).
Running water
Paper towels

FREQUENCY

Each or ideal frequency of hand washing is unknown, however, always wash hands:

Before and after every patient contact
After toileting
Before and after eating
Before and after performing invasive procedures
Before and after touching wounds or skin eruptions
Before putting on gloves and upon removing gloves (both disposable and utility gloves)
Immediately when hand and/or skin surfaces become contaminated with blood or potentially infectious body fluids
Before leaving the clinic at end of clinic day

PROCEDURE

Remove jewelry, push watch and sleeves above wrists.
Wet hands under warm, running water.
Apply soap to hands, (use of foot controlled dispenser is recommended).
Wash vigorously using plenty of lather and friction for 10 or more seconds.
Interlace fingers, rub palms and back of hands with a circular motion.
Clean between fingers and clean around nails and under nails.
Rinse hands and wrists thoroughly, keeping hands down and elbows up.
Dry hands from the fingers toward wrist with a paper towel.

NOTE

Care should be taken to avoid contamination through direct contact of hands and faucet. Water should be turned both on and off using a foot pedal (ideal), disposable tap covers, or clean paper towels.

When a handwashing facility is not available, use an appropriate towelette of substance provided to cleanse hands; however, hands shall be washed as above as soon as possible. When home visiting, hands may be washed at the next home or facility.

DIAPHRAGM FITTING RINGS

PURPOSE

To provide diaphragm fitting rings free of pathogenic microorganisms.

SUPPLIES

Utility gloves
Liquid soap and water
Clean, dry, closed container
Autoclave towel

PROCEDURE

∗Autoclave Method

Wash hands, put on utility gloves.
Clean diaphragm-fitting rings under running water with liquid soap being certain all debris is removed.
Wrap the diaphragm fitting rings individually in an autoclave towel; place in perforated tray.
Remove gloves and wash hands.
Cycle the autoclave at 121c for 15 minutes.
Place in a clean, dry closed container until ready for use.

∗**Bounds and Hoffman (ref) note that until single use devices are available, heat decontamination by autoclave or boiling water for a full 5 minutes at a rapid boil remain the only safe method. The Tennessee Department of Health believes that autoclave sterilization is the only safe option for assuring sterilization of the rings.**

CLEANING EAR SPECULUM

PURPOSE

To provide disinfected ear speculums for each patient.

SUPPLIES

Germicidal detergent
A labeled container for DIRTY ear speculums
A labeled container for CLEAN ear speculums
Q tips
Disinfecting solution
Paper towels
Utility gloves
Timer

PROCEDURE

When used, ear speculums should be placed into a germicidal soap solution for soaking, being certain this container is placed out of reach of children.

To clean ear speculums, wash hands, put on utility gloves. Pour out soaking solution, clean ear speculums with fresh germicidal soap solution being sure to remove all earwax and debris with a Q-tip if necessary.
Rinse thoroughly under tap water.
Place into a clean container of disinfecting solution according to label instructions.
Rinse with tap water, dry with a paper towel and store in a DRY, COVERED CONTAINER, DATED AND LABELED CLEAN.

PRECAUTIONS

DISCARD SOAKING SOLUTIONS DAILY. THESE SOLUTIONS SHOULD NOT BE REUSED. Container labeled DIRTY should be cleaned daily with disinfecting solution, rinsed and dried daily.

Be certain to place all soaking solutions out of reach of children.

Improperly disinfected ear speculums may harbor bacteria which could be transmitted from one patient to another patient.

Disposable ear speculums should be disposed of into regular waste and should never be reused.

FORCEPS, SCISSORS, AND SUTURE SETS

PURPOSE

To provide clinical equipment that is free of pathogenic organisms.

SUPPLIES

Gloves
Paper towels
Detergent
Running water
1:10 sodium hypochlorite (bleach)
or EPS approved disinfectant
Autoclave wrapping
Autoclave

PROCEDURE

Those instruments that must be sterile for reuse will be autoclaved.

Observe handwashing and glove procedure

Clean used forceps, scissors and suture sets with a detergent making certain that all secretions and/or debris are removed.

Wrap cleaned, dried forceps, scissors and suture sets and autoclave following manufacturer's recommendations regarding proper temperature, length of cycle, loading and use.

Date package

Wash and rinse utility gloves under running water. Rinse with 1:10 bleach solution, dry with a paper towel.

All disposable devices that have been used in such a manner that they become contaminated with blood or other potentially infectious body fluids must be disposed of into contaminated waste bins.

* Note:Forceps, tongs, pick-ups, etc. shall not be stored in containers with liquid soap or alcohol.

VAGINAL SPECULUMS

PURPOSE

To provide vaginal speculums free of pathogenic organisms.

SUPPLIES

Utility gloves
Detergent
Running water
1:10 sodium hypochlorite solution(bleach)
or EPS approved disinfectant
Paper towels
Autoclave
Autoclave wrappers
Timer

PROCEDURE

Metal Speculum:

Observe handwashing and glove procedure
Immediately after use, place speculums in a leakproof container containing an EPA approved disinfectant or bleach solution, timed according to the manufacturers instructions. (30 minutes for 1:10 bleach)
Discard soaking solution
Wash in soapy water
Dry with paper towels
Wrap speculums individually or by number needed in an examining room and date.
Autoclave according to manufacturers directions.
Store in a clean dry cabinet in an examining table.
Utility gloves should be washed under running water with soap. Rinse in freshly made 1:10 dilution of bleach. Dry and put away.

Disposable Speculum:

Used disposable vaginal speculums shall be disposed of in contaminated waste container, or disinfected as above by soaking in bleach solution or other EPA approved disinfectant and discarding in regular waste.

MANNEQUINS

PURPOSE

To provide mannequins free of pathogenic organisms for CPR certification and practice.
To prevent the risk for transmission of infectious pathogens.

SUPPLIES

Utility gloves
20 cc syringe
Liquid soap and water
1:10 solution of bleach made fresh at beginning of class
Spray bottle
Paper towels
Gauze Swabs
Disposable lungs

PROCEDURE

After each student, the mannequins face and inside mouth is wiped vigorously with a gauze pad moistened with 1:10 solution of bleach or EPA approved disinfectant.
After class has ended observe handwashing and utility glove procedure
Completely disassemble the mannequin
Discard disposable lungs into regular waste.
Wash all external and internal surfaces (plus protective face shields) with warm soapy water.
Flush head with 1:10 solution bleach using syringe.
Rinse all surfaces with fresh water
Wet all surfaces with 1:10 solution bleach and leave for 10 minutes.
Rinse with fresh water and dry all surfaces with paper towels.
Allow internal parts to dry or use hair dryer.
The clothes and hair of the mannequin should be washed monthly or when visibly dirty.
Clean utility gloves under running water with detergent, rinse with 1:10 solution bleach and dry with towels.
All left over 1:10 bleach should be discarded.

THERMOMETERS

PURPOSE

Provide thermometers free of pathogenic microorganisms

SUPPLIES

Utility gloves
Thermometer Sheaths
Covered container labeled DIRTY ORAL
Covered container labeled DIRTY RECTAL
Green Soap
1:10 solution bleach
Running water

PROCEDURE

To use thermometer cover with sheath before putting into patient's mouth.
After use thermometer sheaths should be disposed of into regular waste.
Thermometers should be placed in green soap to soak.
At end of clinic thermometers shall be rinsed under running cold water and placed into a clean leakproof container.
Cover thermometers with 1:10 solution bleach to soak overnight.
In a.m. thermometers should be rinsed thoroughly to remove bleach.
Make certain the bleach is completely rinsed from thermometers.
Dry with paper towels
Place in clean ORAL (or RECTAL) container for use
Utility gloves should be washed with detergent under running water and rinsed with 1:10 dilution of bleach.
Dry and put away.

Electronic thermometers have individual protective sheaths that are disposed of after use.
To clean electronic thermometers follow manufacturer instructions for cleaning.

NOTE: Oral and rectal thermometers shall be cleaned separately and stored separately.

If sheaths are not being used, dirty thermometers are to be cleaned the same way beginning with putting used thermometers into green soap solution.

NEEDLES, SYRINGES, CAPILLARY TUBES AND SHARPS

See methods of compliance , page 8 & 9 under OSHA regulations for required use of safer sharps

PURPOSE

To prevent needle stick and/or sharp injuries to HCW or patient. The most common cause of HIV, HBV, and HCV infection in HCW's without risk behaviors is needle stick injuries.

SUPPLIES

Hard plastic puncture-proof containers in every clinic room or work site, placed conveniently near HCW using needles, syringes or sharps.

PROCEDURE

After use, syringes with needles attached shall be dropped immediately into hard plastic puncture proof container labeled biohazard or colored red.
Vacutainer holders, lancets, scalpel blades, capillary tubes and all other sharps shall be dropped into the sharps container.

PRECAUTIONS

Needles shall not be clipped, bent, broken or removed from the syringe.
By not manipulating the needle syringe unit the danger of needle stick is circumvented.
Sharps, lancets, scalpel blades, capillary tubes put directly into sharps container prevents injury and possible contamination of the HCW.
Sharps containers must not be overfilled.
Filled sharps containers shall be securely closed and disposed according to infectious waste regulations (Section V).
Sharps containers shall be placed out of the reach of children.

USED DRESSINGS

PURPOSE

To prevent transmission of pathogenic microorganisms.

SUPPLIES

Plastic bags
Disposable gloves
1:10 solution bleach

PROCEDURE

Observe hand washing - glove procedure
Remove dressings
Place immediately into an open plastic bag
Place all sponges etc. used to clean wound into open plastic bag
Remove gloves and discard into plastic bag
Wash hands, put on fresh gloves, apply fresh dressing
Pour enough of 1:10 solution bleach into plastic bag to saturate contents
Seal bag, put into another plastic bag, put into patient's trash.

BLOOD AND INFECTIOUS MATERIAL SPILLS PRECAUTIONS

PURPOSE

To prevent transmission of pathogenic microorganisms.

SUPPLIES

A spill kit should be available in each clinic or laboratory setting and should be available for any staff making home health visits.

Bleach - full strength
Bucket or other leak proof container
Paper towels
Utility gloves
Forceps or tongs
Spray bottle

PROCEDURE

Don gloves and lab coat or apron:

Small spills:
Wipe up with paper towels, spray with freshly made 1:10 bleach.

Large spills:
Pour full strength bleach around edges of spill and over spill or use paper towels soaked in bleach.
If feasible allow 20 minutes of contact time to ensure germicidal action.
Gather all materials into bucket and soak in bleach for 30 minutes further and then discard.
Disinfect all materials to be placed back in spill kit with 1:10 bleach for 30 minutes.

NOTE:

Any spill of blood or body fluids contaminated with blood or other potentially infectious body fluids shall be treated as above.

STERLIZATION:AUTOCLAVES

DEFINITION

Sterilization is a process with the objective of removal and destruction of all living microorganisms including spores that may exist on the surface of an article or in a fluid.

PURPOSE

To assure the sterility of instruments and supplies.

PROCEDURE

Manufacturer's representative must inspect new autoclaves prior to first use. All autoclaves should be inspected annually by manufacturer's representative or other individual trained to service and/or inspect autoclave.

Follow manufacturer's recommendations regarding proper temperature, length of cycle, loading and use.

All employees operating the autoclave must be instructed in the correct operating procedures.

Place a spore capsule in the center of a package to determine if autoclave is reaching the required temperature. Keep a log to record findings. Spore testing should be done based on number of load runs (once a week to once a month). Follow the directions specific to spore test used.

If spores are not killed in routine spore tests, the sterilizer should immediately be checked for proper use and function and the spore test repeated. Instruments autoclaved during this cycle should be re-autoclaved once the repeat spore test is negative. IF SPORE TEST REMAINS POSITIVE, use of the sterilizer should be discontinued until it is serviced.

ANY POSITIVE SPORE TEST RESULTS SHOULD BE REPORTED TO THE IMMEDIATE SUPERVISOR.

STORAGE OF SUPPLIES

PURPOSE

To maintain the integrity of the sterile or non-sterile supplies.

EQUIPMENT/SUPPLIES

A dry, clean shelf, drawer or cabinet
Clearly wrapped, dated and labeled supplies

PROCEDURE

All sterile supplies should be kept wrapped, labeled, dated and stored on the shelf or in a drawer.

Non-sterile supplies and sterile supplies should be separated.

All supplies should be checked for package integrity and expiration dates before use.

Muslin and paper wrapped sterile supplies have an expiration date of 30 days if kept dry and the integrity of the package is maintained.

Heat-sealed supplies are considered sterile for one year from the date sterilized.

Commercially prepared sterile supplies may have an expiration date for more than one year.

If a sterile package is punctured, torn or wet, the sterility is questioned. The package should be considered non-sterile, re-cleaned, re-wrapped and re-autoclaved, if not a commercially prepared, disposable item.

V. Infectious Waste Regulations

STATE OF TENNESSEE
DEPARTMENTS INVOLVED IN DISPOSAL OF INFECTIOUS WASTE

TN Department of Health
Division of Health Care Facilities
1st Floor, Cordell Hull Building
425 5th Avenue North
Nashville, TN 37247-0508
615-741-7221

TN Department of Environment and Conservation
Division of Solid Waste Management
5th Floor, L & C Tower
401 Church Street
Nashville, TN 37243-1535
615-532-0780

TN Department of Environment and Conservation
Division of Air Pollution Control
4th Floor, L & C Tower
401 Church Street
Nashville, TN 37243-1535
615-532-0554

LAW

Solid Waste Disposal Act (Chapter 21-1)
Air Pollution control Act (Chapter 25)

REGULATION

Hospital Rules and Regulations (Chapter 1200-8-2.02(a))
Solid Waste Processing and Disposal (Rule 1200-1-7)
Infectious Waste Incineration Rules and Regulations (Chapter 1200-3-25)

SCOPE

Tennessee's program for infectious waste management is split among three divisions; the Division of Health Care Facilities in the Department of Health which regulates the handling and treatment of infectious waste; the Division of Solid Waste Management in the Department of Environment and Conservation which approves the disposal of these wastes in sanitary landfills; and the Division of Air Pollution Control which sets the minimum standards for the operation of infectious waste incinerators.

DEFINITION

"Infectious Waste" means solid or liquid wastes that contain pathogens with sufficient virulence and quantity such that exposure to the waste by a susceptible host could result in infectious disease. The following categories are included:

* Wastes contaminated by patients who are isolated due to communicable disease
* Cultures and stocks of infectious agents
* Waste human blood and blood products
* Pathological wastes
* All discarded sharps
* Contaminated carcasses, body parts, and bedding of animals
* Other wastes determined infectious by the facility

SEGREGATION

Infectious waste must be segregated from other wastes at the point of origin. Those wastes posing additional hazards (E.G., chemical, radiological) must be further segregated as necessary for proper management.

PACKAGING

Packaging must be selected and utilized for the type of infectious waste the package will contain, how the waste will be treated and disposed, and how it will be handled and transported prior to treatment and disposal. Contaminated sharps must be placed directly into leak-proof, rigid, puncture-resistant containers which are tightly lidded, and pathological waste must be contained in opaque packaging. Whether disposable or reusable, all containers, bags, and boxes used for containment and disposal must be conspicuously identified.

STORAGE

Storage must be in a manner and location which affords protection from animals, precipitation, wind, and direct sunlight, and which does not pose a safety hazard, provide a breeding place or food source for insects or rodents, or create a nuisance.

TREATMENT/DISPOSAL

Infectious waste that is treated by incineration, steam sterilization, or some other process that renders it non-infectious, may be disposed of as solid waste. Liquid or semi-liquid infectious wastes may be discharged into the collection sewerage system of a wastewater treatment facility. Except for those human anatomical remains which are transferred by a mortician for cremation or burial, all other remains must be incinerated or discharged (following grinding) to the sewer.

Infectious wastes may only be landfilled if approval is obtained from the Division of Solid Waste Management. A policy statement issued by this Division sets forth restrictions and minimum requirements that must be met.

PERMITTING

Incinerators must be authorized to incinerate infectious waste pursuant to the Air Pollution Control Standards for Incineration, the Solid Waste Processing and Disposal Rule, and the Solid Waste Disposal Act. Effective March 18, 1990, medical waste incinerators are either exempted from regulation or subject to a "permit-by-rule" as solid waste processing facilities under chapter 1200-1-7. Currently, operating facilities should have fulfilled notification requirements by September 18, 1990. New facilities must satisfy notification requirements at least 30 days prior to operations starting. In addition, the appropriate Division office for your area must grant special waste approval. To receive the name of your Division office, contact the Division of Solid Waste Management in Nashville, Tennessee.

DOC/doc10

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF SOLID WASTE MANAGEMENT

DATE: March 23,1993

TO: DSWM Staff

FROM: Tom Tiesler, Director, Division of Solid Waste Management

SUBJECT: "Special Waste" Approval for Waste Generated by the Homeowner From His Own Household

The regulations governing the management of "special waste" were designed to regulate waste posing special characteristics that was generated by facilities other than individual homeowners. Unfortunately, this is not spelled out in the regulations and when the regulations are strictly applied, such homeowner must have approval from the division and must pay a fee for any type of "special waste" (sludge, bulky waste, pesticide waste, medical waste, exempted hazardous waste, etc.), irregardless of quantity, which is disposed of in a Class 1, 11, III, or IV disposal facility. This means that the homeowner should have "special waste" approval of all household hazardous wastes, irregardless of quantity, and pay the $250.00 for each waste stream.

It is the intent of this policy to specifically exclude homeowners from having to obtain a "special waste" evaluation and approval from the Division prior to the disposal of their household waste generated from their place of residence. This exemption also includes the payment of the "special waste" approval fee.

POLICY/notebook/I 4

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF SOLID WASTE MANAGEMENT

DATE: December 15,1993

TO: DSWM Staff

FROM: Tom Tiesler, Director, Division of Solid Waste Management

SUBJECT: Medical Waste – Non-Infectious Disposal

Rule 1200-1-7-.04(2)(k)4 specifies that medical waste is a special waste unless the waste has been rendered non-infectious by sterilization techniques. If the waste has been rendered non-infectious the waste is no longer special waste and requires no special handling. DSWM recognizes that there are other methodologies which are capable of rendering a medical waste non-infectious, however, the expertise for such determinations are within the health care facility industry. In order to protect the integrity of the solid waste Rules and maintain the option for health care facilities to utilize new technologies, the determination of non-infectious will be the responsibility of the facility. Therefore, if a health care facility proposes the utilization of new technology the facility must certify that the waste is "non-infectious". This certification shall be in the form of a letter to the disposal facility with a copy to the appropriate field office. If the disposal facility determines that the technology is not appropriate for their operation a letter rejecting the waste should be sent to the field office.

POLICY/notebook/15

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF SOLID WASTE MANAGEMENT

DATE: June 5, 1995

TO: DSWM Staff

FROM: Tom Tiesler, Director, Division of Solid Waste Management

SUBJECT: Tennessee Division of Solid Waste Management Recommendations for Landfill Disposal of Medical Wastes (Replaces SW 88-1 policy memo dated 4-29-83)

Rule 1200-1-7-.01(2) defines medical waste as follows:

"Medical Wastes" means the following solid wastes:

A. Wastes generated by hospitalized patients who are isolated to protect others from communicable diseases (see the U. S. Centers for Disease Control Guidelines for Isolation Precautions in Hospitals, July, 1983 for definition of diseases requiring such isolation).

B. Cultures and stocks of infectious agents, including specimen cultures from medical and pathological laboratories, cultures and stocks of infectious agents from research and industrial laboratories, wastes from the production of biologicals, discarded live and attenuated vaccines, and culture dishes and devices used to transfer, inoculate, and mix cultures.

C. Waste human blood and blood products such as serum, plasma, and other blood components.

D. Pathological wastes (i. e., tissues, organs, body parts, and body fluids) that are removed during surgery and autopsy.

E. All discarded sharps (e.g., hypodermic needles, syringes, Pasteur pipettes, broken glass, scalpel blades) used in patient care or which have come into contact with infectious agents during use in medical, research, or industrial laboratories.

F. Contaminated carcasses, body parts, and bedding of animals that were intentionally exposed to pathogens in research in the production of biologicals, or in the in vivo testing of pharmaceuticals,

G. The following wastes from patents known to be infected with bloodborne disease- contaminated wastes from surgery and autopsy (e.g., soiled dressings, sponges, drapes, lavage tubes, drainage sets, underpads, surgical gloves.

Wastes from medical, pathological, pharmaceutical, or other research, commercial, or Industrial laboratories that were in contact with infamous agents (e-g., specimen containers, slices and cover slips, disposable gloves, lab coats, aprons).

Wastes that were in contact with the blood of patients undergoing hemodialysis, including contaminated disposal equipment and supplies such as tubing, filters, disposable sheets, towels, gloves, aprons, and lab coat(s).

Discard equipment and parts that were used in patient cars, medical and industrial laboratories, research, and in the production and testing of certain pharmaceuticals and that may be contaminated with infectious agents.

Rule 1200-1-7-.04(2)(k)4 provides for the following waste definitions:

Medical waste is a special waste which requires written approval by the Commissioner prior to disposal as described as part 2 of this subparagraph.
Medical waste which has been rendered noninfectious by sterilization techniques would not require special waste approval prior to disposal.

Rule 1200-1.7-.01(4) provides for the Special Waste approval process as follows:

Special Waste Approval Process

a. Applicability - the procedures and other requirements of this paragraph shall only apply to all Class 1, Class 11, Class 111, and Class 1V facilities.

b. General Requirement - Except as may be specifically allowed in the permit, and operator may not accept for processing or disposal at his facility any special waste unless and until specifically approved to do so in writing by the Department.

c. Procedures

1. Persons who wish to process or dispose of special wastes at a facility must apply to the Department to do so. Such application must be on a form provided by the Department and completed according to the accompanying instructions. This application shall include, but not necessarily be limited to a chemical and physical description of the solid waste, the amounts of and frequencies such solid waste is to be managed at the facility, a description of the processes or operations generating the
waste, and an identification of the facility which such person wants to handle his waste.

2. Applications shall be evaluated by the Commissioner upon receipt. If it is determined by the Commissioner that the facility can safely and effectively manage the special waste, considering the nature of the special waste and the design and operation of the facility, the Commissioner shall notify the operator in writing (with a copy to the applicant) for his approval. If the Commissioner determines that the facility cannot so manage the special waste, he will notify the applicant (with a copy to the operator) in writing of his denial.

d. Conditional Approval

1. In his approval, the Commissioner shall specify those management conditions which he deems necessary to prevent or minimize potential adverse impacts to public health, and the environment in order to promote safe and efficient facility operation. Failure to meet the required management conditions is unlawful disposal under the act.

2. The Commissioner may require the operator to keep records on the receipt and management of certain special wastes.

e. Effect of a Special Waste Approval - A special waste approval granted by The Commissioner does not grant any right of disposal of the special waste at the designated facility. The operator may refuse to accept any special waste even if it has been approved by the Commissioner to be disposed of at his facility.

The Division recommends that all medical wastes be incinerated, steam sterilized, or otherwise rendered non-infectious prior to disposal in sanitary landfills. However, this Division does believe that medical wastes can be landfilled without identifiable risk to public health or the environment if certain precautions are taken. Therefore, it shall be the practice of this Division that the following limitations and requirements be included as a minimum in any special waste approval for the landfill disposal of untreated medical wastes and that they be strictly enforced.

Waste Steam Limitations - As described below, certain categories of medical waste may not be disposed of in sanitary landfills or may be disposed of only after they have been treated or packaged in certain ways.

a. Sharps must be securely packaged in puncture-proof packaging prior to landfilling.

b. Cultures and stocks of infectious agents and associated biologicals must not be landfilled unless and until they have been treated (a-g-, autoclaved, incinerated) to render those non-infectious. Once they have been properly treated, most such wastes including those from typical health care institutional may be landfilled as part of the facility's normal wastes with the special management requirements established later in this policy memorandum).

c. Human blood and blood products and other body fluids may not be landfilled. This restriction applies to bulk liquids or wastes containing substantive amounts of free liquids, but does not apply to simply blood contaminated materials such as empty blood bags, bandages, or "dirty" linens.

d. Recognizable human organs and body parts may not be landfilled.

Operational Restrictions - Medical wastes must be managed at the landfill in accordance with the following provisions.

A. Medical wastes must be transported to the landfill separately from other solid wastes and in securely tied plastic bags or other leak-proof containers.

B. The landfill operator must obtain advance notice prior to receiving a shipment of medical waste, or a routine delivery schedule must be established, such that the operator will have time to prepare to receive the waste.

C. The landfill operator must confine unloading and disposal operations to a specific area, separate from the normal working place, prepared by him to ensure proper disposal with minimum complications.

D. By the end of the operating day. the landfill operator shall have applied at least one foot of cover material over the waste and shall have compacted the replaced cover material. There should be no compaction of uncovered infectious waste.

It should be noted that the above practice and requirements do not obligate this Division to allow the disposal of any medical waste in any landfill. The granting of Division approval for disposal of any special waste in a landfill is a case-by-case determination to be made at the Division Field Office level based on several factors. That approval should be denied or revoked if the Field Office Manager has reason to believe that the above requirements will not be or are not being met.

It should also be noted that this Division's approval does not obligate the landfill operator to accept a medical waste for disposal. He may refuse to accept such waste or he may impose additional conditions on the medical waste generator.

VI. Infection Control Training Plan

Infection Control
Training Plan
Tennessee Department of Health

Federal Register Vol. 56 No. 235, December 6, 1991
Biohazard B(2)

"Employers shall ensure that all employees with occupational exposure participate in a training program which must be provided at no cost to the employee and during work hours."

Purpose: (1) To provide all employees who during their routine work assignment, are subject to contact with blood and body fluids, with the information necessary to protect themselves against exposure to disease, injury or other hazardous materials.

(2) To provide the above stated employees with the information necessary to take appropriate action in the event exposure does occur.

Activities: (1) Provide initial training in accordance with Federal regulations.

(2) Provide inservice at least annually consisting of review and update of pertinent information.

(3) Provide all new employees who are at risk of occupational exposure with an orientation consisting of information contained in these guidelines before the employee enters the clinical setting.

(4) Conduct an evaluation or testing to ascertain the employees understanding of the information given during the inservice or orientation session.

All employees must be able to answer the following questions.

These five basic questions will be asked to employees by a TOSHA inspector when determining if a facility is in compliance with the training section of the Blood borne Pathogen Standard, 29 CFR 1910.1030.

Q. (a.) What does "Universal Precautions" mean?

Q. (b.) What do you do when there is a blood spill?

a. personal protection

b. clean-up and disposal

c. disinfection (apply hazard communication standard)

Q. (c.) What do you do with contaminated sharps and laundry?

Q. (d.) Have you been offered the hepatitis vaccination free of charge?

Q. (e.) Where is the "Exposure Control Plan" and has it been explained to you, and have you been trained?

(5) Provide additional training when changes involving occupational exposure such as modification of task, adding new procedures or adding new tasks.

Training material must be of appropriate content, vocabulary and literary level and language.

Persons conducting the training shall be knowledgeable of the training content as it relates to the workplace that is being addressed.

A. Training Content

The training program shall contain the following:

1. Provide accessible copy of the regulatory text and explanation of its contents.
2. General explanation of the epidemiology and symptoms of blood borne diseases.
3. Explanation of mode of transmission for blood borne pathogens.
4. Explanation of the employers Infection Control Plan and written statement of how the employee can obtain a copy.
5. Explanation regarding the recognition of tasks that may involve the employee with blood and other potentially infectious or hazardous materials.
6. Explanation of universal precautions; the use and limitation of methods that will prevent or reduce exposure. These methods include engineering controls, work practice and personal protection equipment. (See Section III)
7. Provide information on the types, proper use, location, handling, removal, decontamination and disposal of personal protective equipment.
8. Explanation of basis for selection of personal equipment: i.e. what equipment, when.
9. Provide information on Hepatitis B vaccine including:
   (a.) efficacy
   (b.) safety
   (c.) method of administration
   (d.) benefits
   The vaccine is to be offered by the employer to the employee free of charge.
10. Explain guidelines regarding appropriate action to take and the person to call in the event of an emergency involving blood and other potentially infectious waste.
11. Explain guidelines to be followed in case of an exposure incident. Discuss the medical follow-up that will be available.
12. Discuss post exposure evaluation and follow-up that the employer is required to provide for the employee following exposure.
13. Explanation of signs, labels or color codes required by TOSHA.
14. Offer opportunity during training session for participant participation, i.e. questions during the training session .

B. Record Keeping - Training

Training records shall include the following information:

1. Dates of the training sessions.
2. Contents or summary of material presented.
3. Name and qualifications of person conducting the training.

4. Name and job title of persons attending the training.

Training records shall be maintained for 3 years from the date that the training occurred.

C. Availability of Records

The employer shall ensure that all records required by this section records be made available upon the request to the Assistant Secretary of Labor and the Director of OSHA for examination and copying.

D. Training

Employee training records shall be made available upon request for examinations and copying to the employee, the employee's representative, Director of OSHA and the Assistant Secretary of Labor.

E. Transfer of Records

The employer shall comply with requirements involving transfers of record as set forth in 29 CSR. If employee ceases business and there is no successor for a prescribed period the employers shall notify the Director of OSHA at least 3 months prior to their disposal and transmit them to the Director.

F. Evaluation of Training

An evaluation of the employee's training and understanding of infection control and hazardous waste management will include the following:

1. Documentation of appropriate orientation and training on file including an update at least annually.
2. Evidence that employees have been given the opportunity to ask questions.
3. Documented evidence that the employee demonstrated understanding of material that was presented during the training.
4. Upon observation, the employee demonstrates appropriate understanding of infection control and hazardous waste management.

Appendices

Appendix A

Postexposure Prophylaxis for Hepatitis B Virus

Table

TABLE 3. Recommended postexposure prophylaxis for exposure to hepatitis B virus

Vaccination and antibody response status of exposed workers*	Treatment		
	Source HBsAg† positive	Source HBsAg† negative	Source unknown or not available for testing
Unvaccinated	HBIG§ x 1 and initiate HB vaccine series¶	Initiate HB vaccine series	Initiate HB vaccine series
Previously vaccinated			
Known responder**	No treatment	No treatment	No treatment
Known nonresponder††	HBIG x 1 and initiate revaccination or HBIG x 2§§	No treatment	If known high risk source, treat as if source were HBsAg positive
Antibody response unknown	Test exposed person for anti-HBs¶¶ 1. If adequate,** no treatment is necessary 2. If inadequate,†† administer HBIG x 1 and vaccine booster	No treatment	Test exposed person for anti-HBs 1. If adequate,¶ no treatment is necessary 2. If inadequate,¶ administer vaccine booster and recheck titer in 1–2 months

* Persons who have previously been infected with HBV are immune to reinfection and do not require postexposure prophylaxis.

† Hepatitis B surface antigen.

§ Hepatitis B immune globulin; dose is 0.06 mL/kg intramuscularly.

¶ Hepatitis B vaccine.

** A responder is a person with adequate levels of serum antibody to HBsAg (i.e., anti-HBs ≥10 mIU/mL).

†† A nonresponder is a person with inadequate response to vaccination (i.e., serum anti-HBs < 10 mIU/mL).

§§ The option of giving one dose of HBIG and reinitiating the vaccine series is preferred for nonresponders who have not completed a second 3-dose vaccine series. For persons who previously completed a second vaccine series but failed to respond, two doses of HBIG are preferred.

¶¶ Antibody to HBsAg.

Appendix A-1

POSTEXPOSURE FOLLOW-UP for HEPATITIS C

Postexposure follow-up of health-care, emergency medical, and public safety Workers for hepatitis C virus (HCV) infection

- For the source, baseline testing for anti-HCV**.°**

- For the person exposed to an HCV-positive source, baseline and follow-up testing including

  - baseline testing for anti-HCV and ALT***** activity; and
  - follow-up testing for anti-HCV (e.g., at 4-6 months) and ALT activity. (If earlier diagnosis of HCV infection is desired, testing for HCV RNA**º** may be performed at 4-6 weeks.)

- Confirmation by supplemental anti-HCV testing of all anti-HCV results reported by positive enzyme immunoassay

---

°Antibody to HCV

*****Alanine aminotransferase

º Ribonucleic acid

Appendix B

TENNESSEE DEPARTMENT OF HEALTH
OCCUPATIONAL EXPOSURE FORM

SOURCE PATIENT CONSENT

TESTING for HIV, HEPATITIS B AND HEPATITIS C

I am being tested for antibodies to Human Immunodeficiency Virus (HIV), the virus that causes AIDS, and for antibodies to Hepatitis B, the virus that causes Hepatitis B, and for antibodies to Hepatitis C, the virus that causes Hepatitis C. These tests are being run because a health care employee received an exposure to my blood or other potentially infectious material.

INFORMATION ON HIV

I understand that a true positive test result indicates infection with the HIV virus, but it does not predict when or if a person will become ill with AIDS. I have been told that if I have a positive HIV test, the process of notifying my sex and/or needle sharing partner(s) should begin.

It has been explained to me that a negative test does NOT guarantee that a person is not infected with the virus. A period of time (6 weeks to 6 months) is required between infection and when antibodies appear. If I have been infected recently, antibodies may not be present yet and the test may show negative.

I have received recommendations on how to avoid the spread of the virus. I further understand that the medical records with my test results are kept confidential. These results will not be released, except with a court order or as outlined in the accompanying consent for release of medical information. In the consent for release of medical information, information is provided only to physician who is treating the person who sustained exposure to my blood or other infectious material and will be maintained in a completely confidential manner.

I hereby consent to have a HIV test performed. I UNDERSTAND THAT I WILL BE GIVEN MY TEST RESULTS ONLY IN PERSON AND THAT FURTHER COUNSELING WILL BE AVAILABLE AT THAT TIME. The results of my test will be made available to the exposed employee above. This employee has been informed of laws concerning disclosure of this information.

_____

Signature Date

INFORMATION ON HEPATITIS B:

Hepatitis B is a virus associated with several different types of liver disease, the most common being acute hepatitis. This disorder can produce either no symptoms at all (carrier state) or minor flu-like symptoms to severe liver disease with dark urine and jaundice or in some cases death. Spread of the virus can be by exposure to blood or other human material, by sexual contact, or through needle sharing. The presence of the virus in the blood can be detected by blood tests for both the virus itself or for antibodies produced by the virus.

I hereby give consent to have a Hepatitis B test performed. I UNDERSTAND THAT I WILL BE GIVEN MY TEST RESULTS ONLY IN PERSON AND THAT FURTHER COUNSELING WILL BE AVAILABLE AT THAT TIME.

_____

Signature Date

SOURCE PATIENT CONSENT

INFORMATION ON HEPATITIS C:

Hepatitis C is a virus associated with liver disease, either acute or chronic liver disease. Hepatitis C (HCV) is transmitted primarily through large or repeated direct percutaneous exposure to blood, often by intravenous drug use. Other methods of transmission are by sexual contact. The presence of the virus in the blood can be detected by blood tests for an antibody to hepatitis C virus. A test for liver disease (alanine aminotransferase or ALT) and a supplemental anti-test will also be done if indicated.

I hereby give consent to have a Hepatitis C test or tests performed. I UNDERSTAND THAT I WILL BE GIVEN MY TEST RESULTS ONLY IN PERSON AND THAT FURTHER COUNSELING WILL BE AVAILABLE AT THAT TIME.

_____

Signature Date

TENNESSEE DEPARTMENT OF HEALTH, BUREAU OF HEALTH SERVICES

Release of Medical Record Information

Patient's Folder No: _____

Patient's Name: _____

Date of Birth: _____

Address: _____

_____

_____

STATEMENT OF AUTHORIZATION FOR RELEASE OF MEDICAL RECORD INFORMATION:

I, _____ **, hereby authorize the** _____
(Name of Patient, Parent or Guardian)

County Health Department to release and/or receive information (including facsimile transmission) relative to my medical record and /or lab results. ALL MEDICAL RECORDS PROVIDED TO THE HEALTH DEPARTMENT FROM AN OUTSIDE AGENCY OFFICIALLY BECOME PART OF THE HEALTH DEPARTMENT RECORD AND ARE SUBJECT TO RELEASE WHEN PROPERLY REQUESTED. This release is relevant to information pertaining to:

☐ **Myself** ☐ **My Child** _____ **(Name)** ☐ **My Legal Ward** _____ **(Name)**

TYPE OF INFORMATION TO BE RELEASED: (Check all that apply, noting inclusions and exclusions)

	Initial		Initial
☐ The medical record EXCLUDING STD, HIV, Family Planning, Prenatal, and Substance Abuse	____	☐ The medical record including STD	____
☐ Immunization record ONLY	____	☐ The medical record including Reproductive Health	____
☐ Information needed to process insurance claims and request payment of benefits to the provider	____	☐ The medical record including Prenatal	____
		☐ The medical record including HIV	____
		☐ The medical record including Alcohol or Substance Abuse	____

THE ABOVE INFORMATION IS TO BE RELEASED TO:

Name: _____

Address: _____

_____

THE ABOVE INFORMATION IS TO BE RELEASED FROM:

Name: _____

Address: _____

_____

This release is valid until the close of business on _____ **Month** _____ **Day** _____ **Year**

Signature of Patient/Parent/Guardian: _____ **Date** _____

Signature of Witness: _____ **Date** _____

PH-1778
(Rev. 8/99)

RDA 150

Appendix D

TENNESSEE DEPARTMENT OF HEALTH
OCCUPATIONAL EXPOSURE FORM

EMPLOYEE CONSENT

TESTING for HIV, HEPATITIS B, and HEPATITIS C

I am being tested for antibodies to Human Immunodeficiency Virus (HIV), the virus that causes AIDS, and for Hepatitis B, the virus that causes Hepatitis B and for Hepatitis C, the virus that causes Hepatitis C. These tests are being run because of my occupational exposure to material possibly infected with these viruses.If I am found to be infected with any of these viruses, I will be referred for proper and confidential medical care.

INFORMATION ON HIV

I understand that a true positive test result indicates infection with the HIV virus, but it does not predict when or if a person will become ill with AIDS. I have been told that if I have a positive HIV test, the process of notifying my sex and/or needle sharing partner(s) should begin.

It has been explained to me that a negative test does NOT guarantee that a person is not infected with the virus. A period of time (6 weeks to 6 months) is required between infection and when antibodies appear.

I have received recommendations on how to avoid the spread of the virus. I further understand that I should report to the physician managing my post exposure follow-up if I develop any illness associated with fever or flu-like symptoms, swollen glands, and fatigue or sore throat.

I further understand that the medical records with my test results are kept confidential.

INFORMATION ON HEPATITIS B

The virus causing Hepatitis B can cause anything from no symptoms to mild flu-like illness to severe liver disease with jaundice and death. Some persons can be carriers of the disease and not be aware they have the virus. Hepatitis B can be spread by contact with blood or other human infectious material, by sexual contact, and by needle sharing. The presence of the virus in the blood can be detected by blood test for the virus and for antibodies to the virus.

INFORMATION ON HEPATITIS C

Hepatitis C is a virus associated with either acute or chronic liver disease. Hepatitis C virus (HCV) is transmitted primarily through large or repeated direct percutaneous exposure to blood, often by intravenous drug use. Other methods of transmission are sexual contacts.

I hereby consent to have tests for HIV, Hepatitis B, and Hepatitis C. I understand that I will be given my test results only in person and that further counseling will be available at that time. The results of my tests will be kept strictly confidential and will be limited to the physician managing my post exposure follow-up, to the CDC representative, and to the supervisory nurse. The records of any test results and other medical information will be kept in a confidential file in a sealed envelope in my personnel file.

_____

Signature Date

APPENDIX E
CLEANING, DISINFECTING AND DISPOSAL EQUIPMENT AND SUPPLIES

Personal Protective Equipment	Use	Maintenance	Disposal
Gloves* - disposable *HCWs allergic to gloves must report to supervisor who can order non allergenic gloves from local procurement person.	During any invasive procedure - dental care, phlebotomy, changing dressings, assessments involving potentially infectious body fluids	Use only once, discard	Gloves used during invasive procedures should be put into contaminated wastes. Gloves not contaminated by blood or other infectious body fluids may be put into regular wastes.
Gloves utility	For cleaning instruments, housekeeping (blood or other possibly infectious spills) and during handling of contaminated laundry.	May be cleaned under running water using a liquid detergent. Rinse in 1:10 dilution freshly made bleach. Dry and put away.	These gloves should be inspected before and after use. Those with holes, cracking, peeling must be thrown away.
Plastic eye wear (wrap around goggles) Face shields	Worn when aerosolization, splatter or spray of potentially infectious body fluids is possible (dental procedures, irrigation of wounds, etc.)	Clean under running water with detergent. Rinse in 1:10 dilution freshly made bleach. Dry and put away.	May be reused. May be disposed of in regular waste (after careful cleaning) if discolored or broken.
Disposable impervious laboratory coats or aprons.	To be worn over uniforms or lab coats to protect from exposure to blood or infectious fluids are possible.	Use only once	Disposed of in contaminated waste when blood or body fluids have gotten on surface of coats or aprons.
Disposable foot and head covers may also be (rarely) necessary.	Used in home care where infectious fluids may contaminate clothing especially when blood or body fluids may be projectile. During patient care, assessments, securing specimens.	Use only once	Place in plastic bag, Pour 1 cup 1:10 Solution bleach into bag, Seal and place into another plastic bag. Put into patient's garbage.
Laundry (Sheets cover for sterile supplies, towels, etc.)		Washable laundry should be placed into leakproof bags for laundering. When visibly contaminated with blood etc. do not agitate before or during bagging. Individuals who do laundry shall be oriented to handling contaminated laundry (i.e. laundry workers will wear utility gloves and impervious aprons to handle contaminated laundry.	
		Hot soapy water plus drying in a dryer is usually sufficient.	The laundry may wish to presoak.
Ambu bags, ventilators,	To assist with emergency resuscitation.	To be kept in a plastic or protective covers. After use, wash outside of bag with soap and water, rinse, dry and put away.	Plastic facemasks of ambu bags shall be thrown away after each use.
Pocket masks	To assist with emergency resuscitation.	Use only once.	Discard in regular waste.

APPENDIX F

GENERAL HOUSEKEEPING

To provide a biosafe environment for HCW's and their patients, a cleaning schedule shall be established.

Items to be cleaned	Barriers to be used	Solutions Necessary	Procedural Activities	Time Line
Patient assessment tables	Utility or latex gloves		Paper barriers shall be used after each patient. Dispose in regular waste.	After each patient.
		Detergent solution 1:10 bleach	When paper becomes wet with blood or other infectious body fluids the paper should be removed to contaminated wastes.	Whenever visibly soiled.
			The table shall be washed with soapy water, rinsed with 1:10 bleach, dried and fresh paper barrier applied.	At the end of each clinic day.
Work tables, counter top	Utility gloves	1:10 bleach solution detergent first if visibly soiled	Clean surfaces with detergent solutions if visibly soiled. Rinse with 1:10 bleach solution and allow to dry	Daily after clinic day.
Autoclave	Utility gloves	Follow manufacturer's instructions	Follow manufacturer's instructions. Rinse with 1:10 solution bleach.	Follow manufacturer's instructions.
Centrifuges	Utility gloves	1:10 bleach	Whenever soiled or when there is a spill or breakage. Rinse with 1:10 bleach solution and allow to dry.	Whenever visibly soiled.
Hemocue	Utility gloves	Follow manufacturer's instructions	Whenever there is a spill or breakage and at the end of the day. Rinse with 1:10 bleach solution.	Following manufacturer's instructions.
Regulated waste	Utility gloves	Soapy water Bleach Red bags or biohazard label for can and plastic bag.	Empty regulated waste can, securing bag carefully. Place bags into regulated waste pick up area. Wash and rinse can with 1:10 bleach as needed. Replace red plastic bag in can. Replace red plastic bag.	When visibly soiled.
Sharps containers			Check sharps containers. They shall not be overfilled. When full close container carefully. Transport to be autoclaved, incinerated or landfilled according to local option.	Check at end of each clinic day. Transport whenever full.
Broken glassware	Utility gloves. Tongs or pick ups	Blood or body fluid spills must be cleaned according to Section IV cleaning, disinfecting, and sterilizing.	Pick up glassware with tongs or pick up device. Place in regular waste, if contaminated put into regulated waste.	Whenever glass is broken.

APPENDIX G

LABELING REQUIREMENTS

Item	No Label Needed if Universal Precautions Are Used and Specific Use of Container or Item is Known to All Employees	Biohazard Label	Red Container	Date Implemented
Regulated waste container (e.g. contaminated sharps containers)		Yes *	Yes	
Reusable contaminated sharps container (e.g. surgical instruments soaking in tray)		Yes*	Yes	
Refrigerator/freezer holding blood or other potentially infectious material		Yes		
Containers used in storage, transport or shipping of blood		Yes*	Yes	
Blood products for clinical use	No labels required			
Individual specimen containers of blood or other potentially infectious materials remaining in health center	Yes*	Yes*	Yes	
Contaminated equipment needing service (e.g. dialysis equipment, suction apparatus)		Yes plus a label specifying where the contamination exists		
Specimens and regulated waste shipped from the primary facility to another facility for service or disposal		Yes*	Yes	
Contaminated laundry	*	Yes *	Yes	
Contaminated laundry sent to another facility that does not use Universal Precautions		Yes*	yes	

*Alternative labeling or color-coding is sufficient if it permits all employees to recognize the containers as requiring compliance with Universal Precautions.